

CLAIM AMENDMENT

Please amend the claims as follows:

1. (currently amended) A method of obtaining transformable callus tissue comprising: germinating a mature corn seed in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section capable of producing callus; isolating the nodal section from the seedling; and culturing the nodal section on a callus induction media to produce embryogenic callus suitable for transformation.
2. (original) The method of claim 1 in which the auxin is picloram and the cytokinin is BAP.
3. (original) The method of claim 4 in which the picloram concentration is between about 0.5 mg/L and about 20 mg/L.
4. (currently amended) The method of claim [[4]] 2 in which the BAP concentration is between about 0.1 mg/L and about 10 mg/L.
5. (original) The method of claim 1 in which the tissue culture media is solid.
6. (original) The method of claim 1 in which the nodal section is obtained from the seedling between 3 and 30 days after germination.
7. (original) The method of claim 6 in which the nodal section is obtained from the seedling between 7 and 10 days after germination.
8. (original) The method of claim 1 further comprising the steps of: transforming the callus with a nucleic acid sequence conferring a selected genetic trait to the transformed callus; and regenerating a transformed plant from the transformed callus containing the nucleic acid sequence.
9. (withdrawn) A method of obtaining transformable callus tissue comprising: germinating a zygotic embryo in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section; isolating the nodal section from the seedling; and culturing the nodal section on a callus induction media to produce embryogenic callus suitable for transformation.

10. (withdrawn) The method of claim 9 in which the auxin is picloram and the cytokinin is BAP.
11. (withdrawn) The method of claim 10 in which the picloram concentration is between about 0.5 mg/L and about 20 mg/L and the BAP concentration is between about 0.1 mg/L and about 10 mg/L.
12. (withdrawn) The method of claim 9 further comprising the steps of: transforming the callus with a nucleic acid sequence conferring a selected genetic trait to the transformed callus; and regenerating a transformed plant from the transformed callus to obtain a plant containing the nucleic acid sequence.
13. (withdrawn) A method of transforming monocotyledonous plants comprising: germinating a zygotic embryo from a monocotyledonous plant in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section; isolating the nodal section from the seedling; culturing the nodal section in a callus induction media to form an embryogenic callus culture; transforming the embryogenic callus culture with a nucleic acid sequence conferring a selected genetic trait to the transformed callus; selecting transformed callus cells; and regenerating a transformed monocotyledonous plant from the transformed callus to obtain a plant containing the nucleic acid sequence.
14. (withdrawn) The method of claim 13 in which the monocotyledonous plant is corn.
15. (withdrawn) A method of transforming monocotyledonous plants comprising: germinating a zygotic embryo from a monocotyledonous plant in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section; isolating the nodal section from the seedling; culturing the nodal section in media to form a multiple bud culture; converting the multiple bud culture to an embryogenic callus culture in callus induction media; transforming the embryogenic callus culture with a nucleic acid sequence conferring a selected genetic trait to the transformed callus; selecting transformed callus cells; and regenerating a transformed monocotyledonous plant from the transformed callus cells to obtain a plant containing the nucleic acid sequence.

16. (currently amended) A method of obtaining transformable callus tissue from a corn plant comprising: priming a mature corn seed; germinating a mature corn seed in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section capable of producing callus; isolating the nodal section from the seedling; culturing the nodal section on callus induction media to produce embryogenic callus.
17. (currently amended) A method of transforming a corn plant comprising: priming a mature corn seed; germinating the mature seed in tissue culture media containing an effective amount of an auxin and an effective amount of a cytokinin to produce a growing seedling containing a nodal section capable of producing callus; isolating the nodal section from the seedling; culturing the nodal section on callus induction media to form an embryogenic callus culture; transforming the embryogenic callus culture with a nucleic acid sequence conferring a selected genetic trait to the transformed callus; selecting transformed callus cells; and regenerating a transformed plant from the transformed callus to obtain a plant containing the nucleic acid sequence.